

SOME INTRODUCED PLANTS OF SALT LAKE COUNTY, UTAH

BY A. O. GARRETT

The following is a fairly representative list of the introduced plants, and incidentally of the introduced weeds, of Salt Lake County. In consideration of the fact that these introduced weeds are by far the most troublesome, it is a pity that their spread was ever permitted. When we realize the immense damage done to agriculture through the agency of weeds, we are surprised that more states do not have regular state "weed inspectors," whose duty shall be the extermination of weeds in general, but especially the watching out for, and the prompt extirpation of, those plants introduced from time to time that are likely to become pests. The writer has observed, in the course of the past ten years, several plants spread themselves throughout Salt Lake City; plants that when he came to Salt Lake City in the autumn of 1902 were either very rare or else were apparently not here at all. A very little directed effort would have saved the day.

Bromus tectorum. Downy Brome Grass. In alfalfa fields and covering the hillsides. Alfalfa hay containing much of this grass fails to command the price of grass-free alfalfa, thereby resulting in an annual depreciation of many thousands of dollars.

Bromus sterilis. Sterile Brome Grass. Associated with *Bromus tectorum*. Equally objectionable.

Bromus hordeaceus. Soft Chess. Abundant on the benches about Salt Lake City.

Rumex crispus. Curled Dock. Abundant along the irrigation ditches.

Rumex Acetosella. Field Sorrel. Occurring occasionally in lawns and waste places. As yet rare.

Polygonum aviculare. Door-weed. Abundant in waste places in city lots.

- Chenopodium album*. Lamb's-quarters. Abundant in waste places.
- Salsola Kali tenuifolia*. Russian Thistle. Abundant in salty soil, and becoming equally abundant along the roadsides and in waste places.
- Amaranthus retroflexus*. Green Amaranth. Common in cultivated fields.
- Saponaria Vaccaria*. Corn Cockle. Not uncommon in fields and waste places.
- Cerastium brachypodum*. Mouse-ear Chickweed. Occasionally occurring in lawns.
- Portulaca oleracea*. Purslane. Found occasionally in cultivated fields.
- Ranunculus arvensis*. Field Crowfoot. Found in one of the canyons by the writer, where it is apparently well established.
- Fumaria officinalis*. Fumitory. Well established along railroad tracks and adjacent roads in some places.
- Brassica nigra*. Black Mustard. Abundant along roadsides and in waste places.
- Brassica Rapa*. Turnip. Not uncommon along roadsides.
- Lepidium Draba*. Hoary Cress. Scarcely known ten years ago, but now becoming abundant.
- Lepidium perfoliatum*. Also becoming abundant. The writer observed this species for the first time about five years ago. So far as I know, this species has not been reported as occurring elsewhere in the United States.
- Conringia orientalis*. Hare's-ear Mustard. Occurring occasionally in waste places in the towns.
- Sisymbrium officinale*. Hedge Mustard. Common in neglected yards.
- Sisymbrium altissimum*. Tumbling Mustard. Another weed, now everywhere, that was unknown ten years ago. On account of its tumbling habit, it spreads very rapidly, and is likely to become as great a nuisance as the Russian Thistle.
- Sophia Sophia*. Herb-Sophia. Abundant in West Salt Lake in waste grounds.
- Capsella Bursa-pastoris*. Shepherd's Purse. This cosmopolitan weed is abundant everywhere.

- Alyssum alyssoides*. Yellow Alyssum. Common on the dry hillsides and occasionally found in waste places in Salt Lake City.
- Camelina sativa*. False Flax. Abundant in waste places.
- Radicula Nasturtium-Aquaticum*. Water Cress. Introduced in the springs between Provo and Springville in 1852, and now abundant throughout the state.
- Erysimum repandum*. Treacle Mustard. Abundant in waste places in Salt Lake City.
- Melilotus alba*. White Sweet Clover. Abundant, especially along irrigation ditches.
- Melilotus officinalis*. Yellow Sweet Clover. Very seldom seen.
- Trifolium repens*. Dutch Clover. Abundant; even found in the canyons to altitudes of nine thousand feet.
- Trifolium hybridum*. Alsike Clover. In waste places in Salt Lake City, and along irrigation streams.
- Trifolium pratense*. Red Clover. Occasionally an escape.
- Geranium pusillum*. Occasionally occurring in grassy places.
- Euphorbia dentata*. Not uncommon in waste places in the southeastern part of Salt Lake City.
- Malva rotundifolia*. Cheeses. Abundant everywhere in waste places.
- Pastinaca sativa*. Parsnip. Not uncommon along irrigation ditches.
- Conium maculatum*. Poison Hemlock. Abundant along irrigation ditches.
- Convolvulus sepium*. Hedge Bindweed. In waste places; not very common.
- Convolvulus arvensis*. Field Bindweed. Abundant in fields and waste grounds.
- Asperugo procumbens*. Madwort. Occasionally found in alfalfa fields and in waste places.
- Lithospermum arvense*. Corn Gromwell. Common in waste places.
- Amsinckia tessellata*. In waste places and about rubbish piles.
- Amsinckia intermedia*. Same as preceding species.
- Mentha spicata*. Spearmint. Abundant in the irrigation ditches throughout the state.

- Nepeta Cataria*. Catnip. Not uncommon in waste places.
- Marrubium vulgare*. Horehound. Abundant in waste ground throughout the state.
- Leonurus Cardiaca*. Motherwort. Occasionally found near streams.
- Lamium amplexicaule*. Henbit. Occasionally found in waste places.
- Lamium purpureum*. Same as above.
- Solanum nigrum*. Common Nightshade. Occasionally occurring in lawns and waste places.
- Datura Tatula*. Purple Jimsonweed. Occasionally found on waste grounds.
- Verbascum Thapsus*. Common Mullein. Occurring at the mouths of the canyons.
- Veronica arvensis*. Corn Speedwell. Occasionally found on lawns.
- Veronica agrestis*. Field Speedwell. Same as preceding species.
- Plantago lanceolata*. English Plantain. Not uncommon on lawns.
- Plantago major*. Common on lawns and along irrigation ditches.
- Rubia tinctoria*. Madder. Well established along irrigation ditches in Sale Lake and Davis counties, but not yet common.
- Leptilon canadense*. Horse-weed. Occasionally occurring in waste places, but not yet common.
- Chrysanthemum Leucanthemum*. Ox-eye Daisy. Has very recently been introduced through the agency of impure grass seed.
- Cirsium lanceolatum*. Common Thistle. Abundant along irrigation ditches.
- Cirsium arvense*. Canada Thistle. Abundant in some places, but not generally distributed.
- Cichorium Intybus*. Chicory. Well established in Salt Lake County for many years, but apparently not spreading rapidly.
- Tragopogon porrifolius*. Salsify. Not uncommon in moist meadows, and apparently spreading rapidly.
- Lactuca Scariola*. Prickly Lettuce. Abundant in waste places.
- Taraxacum officinale*. Dandelion. Most abundant; in lawns and pastures.

Arctium minus. Burdock. Very common along irrigation ditches.

Centaurea solstitialis. Star Thistle. Occasionally found in West Salt Lake.

Matricaria suaveolens. Pineapple Weed. Abundant in waste places.

HIGH SCHOOL,

SALT LAKE CITY, UTAH

FIVE HUNDRED MILES THROUGH THE APPALACHIAN VALLEY

BY ROLAND M. HARPER

The shortest railroad route between Washington and New Orleans, namely, via Lynchburg, Bristol and Chattanooga, 1,118 miles, passes for just about half this distance through the Appalachian Valley, which lies at the northwestern base of the Blue Ridge. The route crosses the Blue Ridge and enters the valley (there known as the Shenandoah Valley) a few miles east of Roanoke, Virginia, and passes out of it into the coastal plain at its extreme southwestern end, near Woodstock, Alabama.

The Appalachian Valley is underlaid by much folded and faulted Paleozoic strata, mostly Cambrian, Ordovician and Silurian, varying lithologically from limestone and dolomite to shale and sandstone, and giving rise to a great variety of soils, among which reddish and yellowish clayey loams seem to predominate. It averages about fifty miles wide, and contains many longitudinal ridges, some of these rising to about 2,500 feet above sea-level, but never exceeding in height the mountains bordering the valley. The highest elevations are in Virginia, but the ridges seem to stand out more conspicuously in Alabama, where the intervening valleys are lower. Between Pulaski and Wytheville, Va., at an elevation of about 2,000 feet, the railroad crosses a region of Lower Carboniferous sandstone, with topography and vegetation strongly resembling that of the Cumberland Plateau to the westward; but elsewhere the scenery is